



## **South Davis Transit Alternatives Analysis (AA) Purpose and Need**

### ***Background***

The Wasatch Front has been experiencing rapid population and employment growth for the last two decades, leading to increased development and increased traffic congestion as a result. Since 1990, Davis County has grown by 52%, to a total of 287,000 estimated residents in 2006. Not only is the population growing, but the County on the whole is also densifying. In 2000, there were approximately 900 residents per square mile, whereas in 2005, there were approximately 1800 residents per square mile. The infrastructure of 1990 is no longer able to satisfy the needs of the larger, and more dense population of Davis County. The South Davis County study area comprises approximately 175,000 of the Davis County residents and will grow to approximately 250,000 by 2020.

The study area consists of seven municipalities, six of which are in Davis County, and a portion of Salt Lake City, which is in Salt Lake County. Each municipality has its own individual needs and desires to integrate transit investments within its own transportation and land use plans. A large portion of the travel patterns (trips) are internal to the city where they originate and many stay within South Davis County. This combined with strong travel demand to Salt Lake City contributes to auto congestion within the study area.

The narrow geographic extent of most of the South Davis County project corridor, with mountains on the east and the Great Salt Lake on the west, lends itself to major north-south transportation facilities. This is typified by the I-15 freeway, which divides the study area and acts as a north/south transportation spine. Access to this major transportation corridor is by a limited number of interchanges, which tend to funnel east/west traffic to a select few roads in the corridor.

UTA currently operates local and express bus service through the study area. The most heavily used route by residents within the study area, as opposed to those traveling through on express service, is the Route 70. Route 70 primarily serves the eastern portion of the communities in South Davis County. The following tables show existing bus service ridership on routes within Davis County.



Average Daily Ridership on South Davis County Bus Routes	
Route	Average Daily Ridership <sup>1</sup>
55 - Weber State / Davis Co. / U of U	1,222
60- Woods Cross	131
61 - Bountiful via State Capitol	121
62 - North Salt Lake	122
63 - West Bountiful	99
70 - SLC / Ogden Commuter	3,577
71 - Centerville	228
<sup>1</sup> Data averaged over one to three months Source: UTA 2003, Summarized by Fehr & Peers, 2007	

### **Purpose**

The purpose of a transportation improvement in South Davis County is to increase mobility within the area, as well as to connect to transportation options serving the rest of the region. The transportation improvement should serve the demand for north/south travel, while also improving east/west connectivity. A proposed transportation project should result in the overall reduction of auto trips by providing alternative transportation choices, especially during commute periods. Expansion of transportation mode choice will also create an opportunity for the consideration and integration of land use plans and the coordination with auxiliary facilities that make transit attractive to the passenger.

### **Need**

#### Public Support for Transit

Through an extensive public outreach process, stakeholders in South Davis County and Salt Lake City have expressed the need for better integration of the current transportation system and increased transit service. While the overall demand for transportation is strongest in the north/south orientation, there is a need to improve the east/west access to north/south mobility. To increase transportation choices, both the efficiency and attractiveness of north/south transit service in the corridor must be improved. These changes include such elements as (1) coordinated and timely transfers; (2) the ability of patrons to access transit stops; (3) increased route coverage on east-west streets; (4) higher frequencies on routes; and (5) improved bus stop facilities and transit information. Residents have also expressed the need for other improved auxiliary facilities such as bicycle routes, sidewalks, and bus shelters.

#### Increasing Travel Demand

Data collection and analysis indicates that the demand for travel will be strongest between the southernmost cities of South Davis County, and the Central Business



District (CBD) of Salt Lake City. The table below shows that the highest demand for travel will be between Salt Lake City and North Salt Lake, Woods Cross and Bountiful.

South Davis to SLC Trip Distribution			
South Davis	Daily Trips		
	2005	2030	% Change
North Salt Lake	8,900	12,300	38%
Bountiful	12,800	14,200	11%
Woods Cross	7,000	11,400	63%
West Bountiful	1,100	1,600	45%
Centerville	3,700	3,900	5%
Farmington	2,400	4,000	67%
Source: WFRC Travel Demand Model, Version 6.0, summarized by Fehr & Peers, February 2007			

#### Congestion at Key Intersections

Modeling shows that, after planned improvements, automobile trips will outweigh the capacity of the roadways on select north/south roadways, as well as at key east/west intersections in the study area, reflecting the need for a reduction in automobile trips to improve mobility. A volume to capacity ratio analysis reveals high levels of congestion on several roadways in North Salt Lake, which is a choke point along the north/south system, affecting travel at each end of the study area. For efficient travel to occur between the cities in South Davis County as well as between South Davis County and Salt Lake City, congestion must be reduced through North Salt Lake. Orchard Drive, and U.S. 89 and 800 West, Center Street and Redwood Road show high levels of congestion in 2030. Roadways between Downtown Salt Lake City and North Salt Lake are also congested with conditions approaching failing levels on I-215, Redwood Road, and Beck Street.

#### Need for Integration of Land Use and Transportation Investments

Growth, development and redevelopment is expected to occur within the study area, with changes in land use patterns in certain locations. Areas with the highest growth rates, and consequently the most land use changes, are located primarily on the west side of I-15, within the communities of North Salt Lake, Woods Cross and Farmington. In the more established community of Bountiful, redevelopment is planned and under way in the downtown area. The area of Salt Lake City within the Study Area is also expected to change significantly between 2005 and 2030 with additions of both job centers and housing. The greatest areas of growth in the Study Area predicted for 2030 include:

- Foxboro in North Salt Lake
- Farmington Station Transit Oriented Development



- Downtown Salt Lake City, specifically the City Creek Center, Gateway, and Marmalade areas
- Bountiful Main Street area

As development and redevelopment occurs in the study area, coordination of land use plans and transportation improvements must consider the need to reduce overall auto trips to improve mobility.

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